

### AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method for extracting biological material from a bacterial spore, the method comprising the steps of:

a) providing a sample chamber and a first and a second electrode, the first and the second electrode and the sample chamber being so positioned that at least a part of the sample chamber is between the first and the second electrode,

b) providing a liquid sample in the sample chamber, which liquid sample comprises a bacterial spore,

c) exposing said liquid sample to an alternating electric field in said sample chamber, said alternating electric field being provided by the first and the second electrode and having a sufficient amplitude so as to extract biological material from the bacterial spore, and

d) performing an analysis on a part of the exposed liquid sample, said part comprising extracted biological material from the bacterial spore.

2. (Previously presented) The method according to claim 1, wherein the bacterial spore is selected from the genus *Bacillus* and/or the genus *Clostridium*.

3. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~ wherein the bacterial spore is from the *Bacillus* group.

4. (Previously presented) The method according to claim 3, wherein the bacterial spore is *Bacillus anthracis*.

5. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the first and a second electrode are separated by a distance being at the most 20 mm.

6. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the bacterial spore is either attached to and/or located between the first and the second electrode.

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7. (Currently amended) The method according to ~~any of the preceding claims~~ claim 1, wherein the frequency of the alternating electric field is at the least 5 kHz.

8. (Previously presented) The method according to claim 7, wherein the frequency of the alternating electric field is at the least 100 kHz.

9. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the alternating electric field is created by modulating the polarity of the first and the second electrode.

10. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the alternating electric field has a substantial form selected ~~chosen~~ from the group consisting of: rectangular, sinusoidal, saw-tooth, asymmetrical triangular, symmetric triangular; and ~~or~~ any combination thereof.

11. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the alternating electric field, in the frequency domain, comprises a least a first and a second frequency component.

12. (Currently amended) The method according to claim 1 ~~any of the preceding claims~~, wherein the biological material comprises a component selected from the group consisting of a cell organelle, a genetic material, and a protein.

13. (Previously presented) The method according to claim 12, wherein the genetic material comprises chromosomal DNA and/or plasmid DNA and/or any type of RNA.

14. (Previously presented) The method according to claim 12, wherein the protein is selected from the group consisting of enzymes, structural proteins, transport proteins, ion channels, toxins, hormones, and receptors.

15. (Currently amended) A chip for extracting biological material from a bacterial spore, the chip comprising a sample chamber comprising:

- a sample chamber comprising a first opening in fluid connection with the surrounding air and a second opening to form a fluid connection with a device,
- a first and a second electrode positioned at opposing sides of the sample chamber, and
- the sample chamber furthermore comprising a liquid sample comprising ~~comprise~~ a biological spore .

16. (Previously presented) The chip according to claim 15, wherein the first and a second electrode are positioned between the first and the second opening.

17. (Currently amended) The chip according to claim 15 ~~or 16~~, wherein the bacterial spore is located between the first and the second electrode.

18. (Previously presented) A device for extracting biological material from a bacterial spore, the device comprising:

- a chip site where the chip is to be located in order be functionally associated with the device,
- an electrical interface between the device and the chip for applying an alternating electric field between the electrodes of the sample chamber, and
- a programmable unit comprising a software that effects that the device performs one or more actions selected from the group consisting of:
  - providing a liquid sample in sample chamber, which liquid sample comprises a bacterial spore,
  - exposing said liquid sample to an alternating electric field in said sample chamber, said alternating electric field having a sufficient amplitude so as to extract biological material from a bacterial spore, and
  - performing an analysis on a part of the exposed liquid sample which part comprises extracted biological material from the bacterial spore.

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19. (Currently amended) A system for extracting biological material from a bacterial spore, the system comprising a chip according to claim 15 ~~any of claims 15-17~~ functionally associated with a device according to claim 18.